

Work Order ID 61200

Wednesday, August 11, 2010 10:07:46 AM



Page 1

Item ID: D3500-1

Accept



Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 8/11/2010

Start Qty: 12.00



Cust Item ID:

Required Date: 8/25/2010

Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan: MF

Date: 10-8-11

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Program Batch No. 61200 Double check by: ☐ 1-Machine Step No 1
per Folio FA641 and inspect per attached Dimension Sheets ☐ 2-Machine Step
No 2 per Folio FA641 and inspect per attached Dimension Sheets ☐ 3-Machine
Step No 3 per Folio FA641 and inspect p

DT 10/08/26

12 0

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

DT 10/08/26

12 0

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

DT 10/09/05

12 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61200

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Page 2

Item ID: D3500-1

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Setup Start



Revision ID:

Stop



Item Name: Saddle

Start Date: 8/11/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 8/25/2010 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

=> M

10/09/07

12

0

140

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

M114841

Memo

0.00

Powder Coating

START TIME: 11:35

3200 FINISH TIME:

OVEN TEMPERATURE:

12:05

BR 10-9-7

(12)

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

=> M

10/09/07

x12

0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 61200

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Page 3

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Stop



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Start Date: 8/11/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 8/25/2010 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursTool ID Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Identify as per dwg & Stock Location: 424

0.00



Packaging

Memo

0.00

Packaging

Pl 10/8/13 (12)

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/14
Pl 10-8-13
(12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

Wednesday, August 11, 2010 10:07:46 AM

Page 1

Work Order ID: 61200



Parent Item: D3500-1



Parent Item Name: Saddle

Start Date: 8/11/2010

Required Date: 8/25/2010

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 06-06-15 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D6102-013

Manufactured

No

100

Each

3.0000

1

12



Saddle Billet

Location

Loc Qty

Loc Code

MAT43

3

59467

3

✓60942

12

N/A

12

ISIT 10/08/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 61200
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500	Rev: C	Page 1 of 1

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.483	0.490		0.488	0.488	0.488	0.488	DJP-II	Vern
B	1.175	1.185		1.180	1.180	1.180	1.180		"
C	3.145	3.155		3.150	3.150	3.150	3.150		"
D	1.175	1.185		1.180	1.180	1.180	1.180		"
E	0.365	0.385		0.378	0.378	0.378	0.378		"
F	0.490	0.510		0.498	0.498	0.497	0.498		"
H									
I	R1.575	R1.595		1.589	1.581	1.5835	1.5845		Dial
J	0.240	0.260		0.240	0.250	0.250	0.250	DJP-II	Vern
K	0.490	0.510		0.501	0.499	0.499	0.499		"
L	3.590	3.650		3.620	3.620	3.620	3.620		"
M	0.315	0.322		0.318	0.318	0.318	0.318		"
N	0.256	0.262		0.259	0.259	0.259	0.259		"
O	6.500	6.520		6.510	6.510	6.510	6.510	CAC-02	Vern
P	5.990	6.010		6.000	6.000	6.000	6.000	DJP-II	Vern
Q	2.820	2.830		2.825	2.825	2.825	2.825		"
R	2.495	2.505		2.495	2.495	2.495	2.495		"
S	2.245	2.255		2.250	2.250	2.250	2.250		"
T	1.120	1.130		1.125	1.125	1.125	1.125		"
U	0.540	0.560		0.545	0.546	0.547	0.545		"
V	0.793	0.803		0.798	0.798	0.798	0.798		Dial
W	R.240	R.260		0.250	0.250	0.250	0.250		Rad Gage
X	0.040	0.060		0.050	0.050	0.050	0.050	DJP-II	Vern
Y	0.100	0.120		0.100	0.110	0.110	0.110		"
AA	R1.125	R1.145		1.1315	1.1315	1.1335	1.132		Dial
AB	R.490	R.510		0.500	0.500	0.500	0.500		Rad Gage
AC	0.615	0.635		0.635	0.635	0.635	0.635	DJP-II	Vern
AD	0.240	0.260		0.259	0.257	0.255	0.254		"
AE	1.810	1.830		1.818	1.826	1.827	1.825		"
AF	0.240	0.260		0.250	0.2505	0.251	0.2495	DJP-02	Mic
AG	0.140	0.160		0.150	0.1505	0.151	0.1495		"
AH	0.140	0.160		0.158	0.155	0.155	0.158	118-120	Deep mic
AI	0.140	0.160		0.158	0.155	0.155	0.158		"
Accept/Reject									

Measured by: DJP
Date: 10/08/06

Audited by: JS
Date: 10/09/05

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 61200
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500	Rev: C	Page 1 of 1

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				5	6	7	8		
A	0.483	0.490		0.488	0.488	0.488	0.488	DJP-II	Vern
B	1.175	1.185		1.180	1.180	1.180	1.180		"
C	3.145	3.155		3.150	3.150	3.150	3.150		"
D	1.175	1.185		1.180	1.180	1.180	1.180		"
E	0.365	0.385		0.378	0.378	0.378	0.378		"
F	0.490	0.510		0.501	0.498	0.499	0.499		"
H									
I	R1.575	R1.595		1.585	1.582	1.583	1.5795		Dial
J	0.240	0.260		0.250	0.252	0.250	0.250	DJP-II	Vern
K	0.490	0.510		0.499	0.499	0.499	0.499		"
L	3.590	3.650		3.620	3.620	3.620	3.620		"
M	0.315	0.322		0.318	0.318	0.318	0.318		"
N	0.256	0.262		0.259	0.259	0.259	0.259		"
O	6.500	6.520		6.510	6.510	6.510	6.510	CNC-02	Vern
P	5.990	6.010		6.000	6.000	6.000	6.000	DJP-II	Vern
Q	2.820	2.830		2.820	2.825	2.825	2.825		"
R	2.495	2.505		2.500	2.500	2.500	2.500		"
S	2.245	2.255		2.250	2.250	2.250	2.250		"
T	1.120	1.130		1.125	1.125	1.125	1.125		"
U	0.540	0.560		0.547	0.544	0.542	0.545		"
V	0.793	0.803		0.798	0.798	0.798	0.798		Dial
W	R.240	R.260		0.250	0.250	0.250	0.250		Rad Gage
X	0.040	0.060		0.050	0.050	0.050	0.050	DJP-II	Vern
Y	0.100	0.120		0.110	0.110	0.110	0.110		"
AA	R1.125	R1.145		1.131	1.1295	1.1305	1.1315		Dial
AB	R.490	R.510		0.500	0.500	0.500	0.500		Rad Gage
AC	0.615	0.635		0.635	0.635	0.635	0.635	DJP-II	Vern
AD	0.240	0.260		0.256	0.257	0.256	0.254		"
AE	1.810	1.830		1.825	1.824	1.825	1.825		"
AF	0.240	0.260		0.250	0.249	0.249	0.250	DJP-02	Mic
AG	0.140	0.160		0.150	0.148	0.149	0.150		"
AH	0.140	0.160		0.153	0.152	0.153	0.151	118-120	Deep Mic
AI	0.140	0.160		0.158	0.156	0.1575	0.158		"
Accept/Reject									

Measured by: <i>DJP</i>
Date: 10/08/31

Audited by: <i>SP</i>
Date: 10/09/05

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	<i>JA</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	61200
Description: Saddle		Part Number:	D3500-1
Inspection Dwg: D3500		Rev: C	Page 1 of 1

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				9	10	11	12		
A	0.483	0.490		0.488	0.488	0.488	0.488	DJP-11	Vern
B	1.175	1.185		1.180	1.180	1.180	1.180		"
C	3.145	3.155		3.150	3.150	3.150	3.150		"
D	1.175	1.185		1.180	1.180	1.180	1.180		"
E	0.365	0.385		0.378	0.378	0.378	0.378		"
F	0.490	0.510		0.500	0.498	0.499	0.497		
H									
I	R1.575	R1.595		1.577	1.580	1.580	1.581		Dial
J	0.240	0.260		0.252	0.251	0.250	0.249	DJP-11	Vern
K	0.490	0.510		0.499	0.499	0.499	0.499		"
L	3.590	3.650		3.620	3.620	3.620	3.620		"
M	0.315	0.322		0.318	0.318	0.318	0.318		"
N	0.256	0.262		0.259	0.259	0.259	0.259		"
O	6.500	6.520		6.510	6.510	6.510	6.510	CNC-02	Vern
P	5.990	6.010		6.000	6.000	6.000	6.000	DJP-11	Vern
Q	2.820	2.830		2.825	2.825	2.825	2.825		"
R	2.495	2.505		2.500	2.500	2.500	2.500		"
S	2.245	2.255		2.250	2.250	2.250	2.250		"
T	1.120	1.130		1.125	1.125	1.125	1.125		"
U	0.540	0.560		0.549	0.546	0.547	0.545		"
V	0.793	0.803		0.798	0.798	0.798	0.798		Dial
W	R.240	R.260		0.250	0.250	0.250	0.250		Rad Gage
X	0.040	0.060		0.050	0.050	0.050	0.050	DJP-11	Vern
Y	0.100	0.120		0.110	0.110	0.110	0.110		"
AA	R1.125	R1.145		1.127	1.1305	1.132	1.1315		Dial
AB	R.490	R.510		0.500	0.500	0.500	0.500		Rad Gage
AC	0.615	0.635		0.635	0.636	0.635	0.635	DJP-11	Vern
AD	0.240	0.260		0.258	0.255	0.256	0.255		"
AE	1.810	1.830		1.823	1.824	1.824	1.825		"
AF	0.240	0.260		0.248	0.248	0.249	0.249	DJP-02	Mic
AG	0.140	0.160		0.148	0.149	0.150	0.149		"
AH	0.140	0.160		0.153	0.151	0.150	0.151	118-120	Deep Mic
AI	0.140	0.160		0.158	0.156	0.156	0.155		
Accept/Reject									

Measured by:	DJP
Date:	10/08/31

Audited by:	SP
Date:	10/08/05

Rev	Date	Change	Revised by	Approved
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B	08.10.07	Dimension H removed	KJ/DD	
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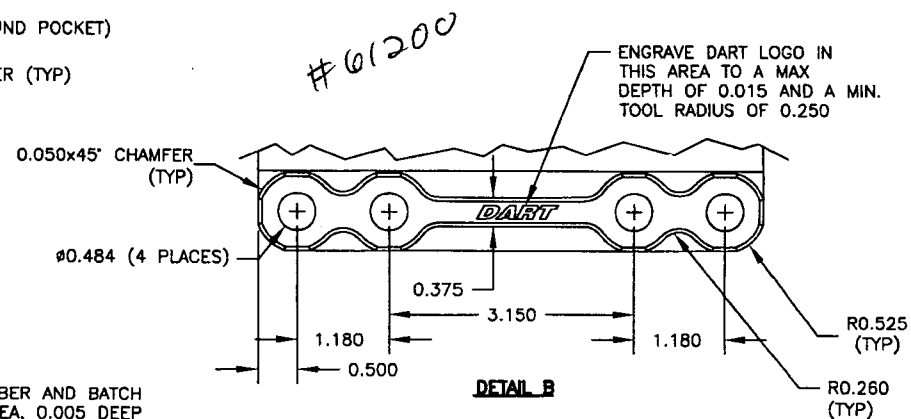
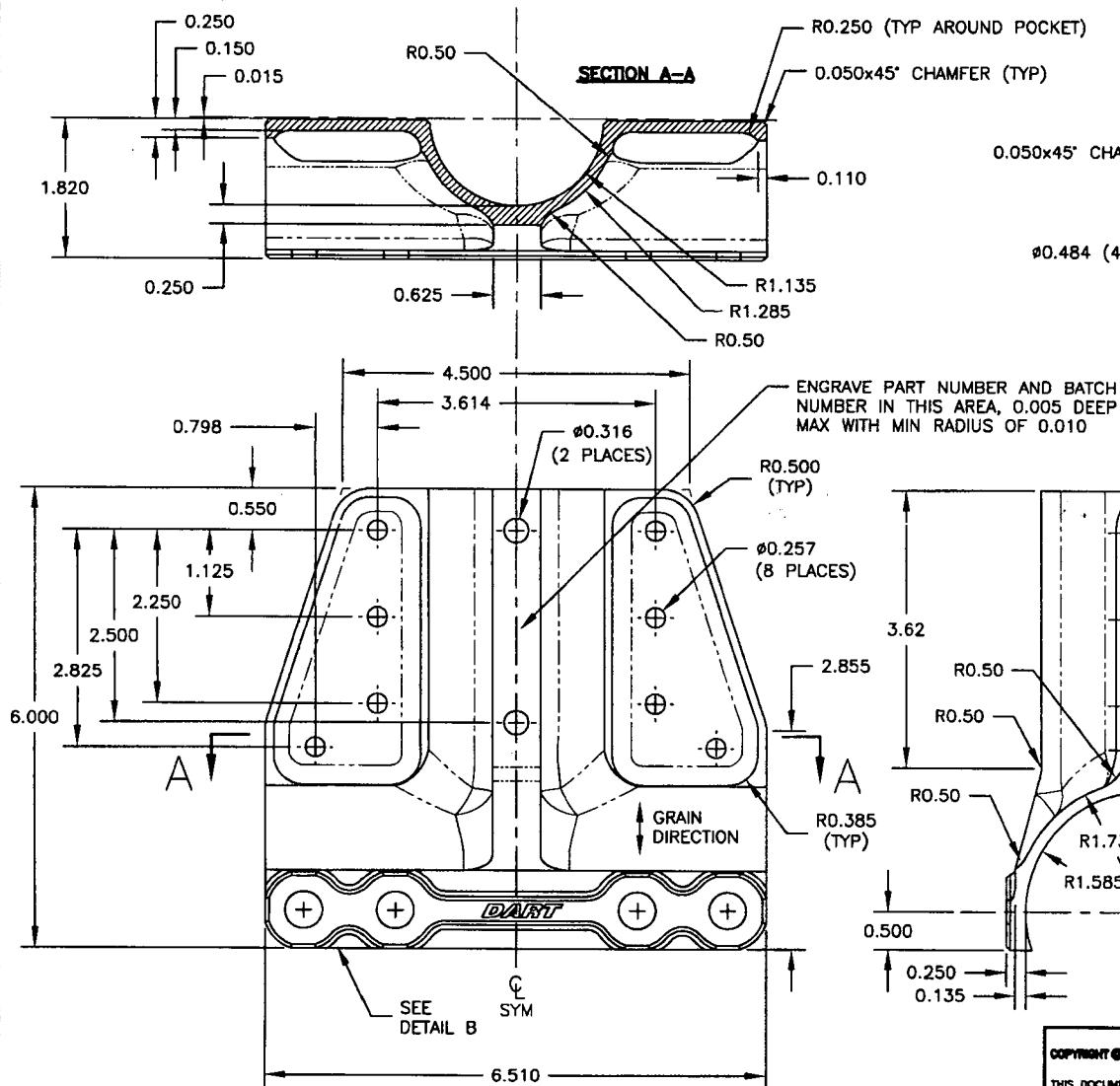
W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries



D3500-1 SADDLE

- 1) MATERIAL: 6061-T6/T651 (QQ-A-200/B OR QQ-A-250/11) (MAKE FROM D6102-013 SADDLE BILLET, 6061)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1, POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

RELEASED

06.68.15 #

C	06.06.30	MAT'L NOW 6061-T6/T651
B	06.05.29	CHANGE DIMS; MAT'L NOW 7075-T7351
A	06.04.18	NEW ISSUE
DESIGN	PH	DART DART AEROSPACE LTD. WINDSOR, ONTARIO, CANADA
CHECKED	PH	DRAWING NO. D3500
DATE	06.06.30	TITLE SADDLE
		REV. C SHEET 1 OF 1 SCALE 2:3

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries